

Radiation Newsletter

Maine Radiation Control Program
Department of Human Services
Division of Health Engineering
10 State House Station
Augusta, Maine 04333-0010

Phone: 207-287-8401
Fax: 207-287-3059
Email: tom.hillman@state.me.us

TTY: 207-287-2070

Website at
www.state.me.us/dhs/eng/rad

In accordance with Title VI of the Civil Rights Act of 1964 (42 U.S.C. §1981, 2000d et seq.) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), the Age Discrimination Act of 1975, as amended (42 U.S.C. §6101 et seq.), Title II of the Americans with Disabilities Act of 1990 (42 U.S.C. §12131 et seq.), and Title IX of the Education Amendments of 1972, (34 C.F.R. Parts 100, 104, 106 and 110), the Maine Department of Human Services does not discriminate on the basis of sex, race, color, national origin, disability or age in admission or access to or treatment or employment in its programs and activities.


SPENT FUEL TO RUSSIA?

On June 6, the lower house of the Russian Parliament (State Duma) voted 243 to 125 in favor of legislation to allow the importation of spent nuclear fuel into the country for disposal. The bill is also expected to win the approval of the upper chamber of the Russian Parliament (Federation Council), which is made up of regional leaders. Russian President Vladimir Putin is expected to then sign the bill into law. The controversial legislation would change current Russian laws barring the importation of radioactive waste into Russia, thereby allowing the Russia Ministry of Atomic Energy to pursue billions of dollars worth of contracts for the disposal of spent fuel from a variety of countries like, Japan, Taiwan, Switzerland, Germany, Spain, Korea and China. The U.S. government has remained officially neutral on the issue.

Under the plan, Russia would import approximately 1,000 tones of spent nuclear fuel per year. The imported fuel would be stored until

2021, during which time Russia would upgrade its reprocessing facilities with money earned from the program.

In response to the vote, Greenpeace called on U.S. President George Bush to veto any shipments of spent fuel originating in the US to Russia. This, according to Greenpeace officials, could cause the entire program to collapse.





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Department of Human Services
MAINE RADIATION
CONTROL PROGRAM

ADVISORY COMMISSION ON
RADIOACTIVE WASTE &
DECOMMISSIONING NEWS

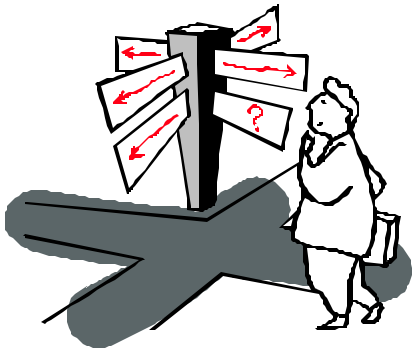
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Special points of interest:	
<ul style="list-style-type: none">Low Level Radioactive Waste and Materials in MaineDecommissioning of Maine Yankee Atomic Power PlantRadioactive Waste ManagementHigh Level Radioactive Waste	
NEXT MEETING OF THE ACORWD is on the morning of 25 SEPT 2001 in room 109 of the State Office Bldg. Check the Website or call for details on time and agenda.	
Radiation Control Program	
Jay Hyland, Manager, 287-5677	
Tom Hillman, LLW, 287-8401	
Shawn Seeley, Materials, 287-5696	
Wayne Malloch, Materials, 287-8404	
Roger Carrier, X-Ray, 287-5719	
Linda Plusquellic, X-Ray, 287-5673	
Bob Stilwell, Radon, 287-5743	
Steve Sprengel, Radon, 287-5698	
Gay Mullen, Radiation, 287-5676	

Iowa Fees on the Transport of Rad Waste

Iowa is geographically located in the US such that many shipments of radioactive waste shipments travel over its three major interstate highways. The Iowa Department of Public Health decided to institute a program to create funds for the proper response in case of an accident involving the transportation of radioactive waste in Iowa. The Iowa Board of Health on 14 March adopted a rule imposing fees for the transport of both high-level and low-level radioactive waste across the State of Iowa. The rule is stated as follows (Iowa Administrative Code Chapter 641-38.8(11):

- All shippers of waste containing radioactive materials transporting waste across Iowa shall pay the following fee(s) unless the agency is able to obtain funding from another source (like a federal agency).
 - \$1,750 per truck for each truck shipment of spent nuclear fuel, high-level radioactive waste or transuranic waste traversing the state or any portion thereof. Single cask truck shipments are subject to a surcharge of \$5 per mile for every mile over 250 miles for the first truck in each shipment.
 - \$250 per truck for transport of low-level radioactive waste.
 - \$1250 for the first cask and \$100 for each additional cask for each rail shipment of spent nuclear fuel, high-level radioactive waste or transuranic waste traversing the state or any portion thereof.
 - \$250 for the first rail car and \$50 for each additional rail car in the train for transport of low-level radioactive waste.
- All fees must be received by the Dept. of Public Health prior to shipment.



How far is it around Iowa?

The rule was to go into effect on 9 May 2001, but has been deferred for 90 days. The American Council of Users of Radioactive Waste has asked that the rule be rescinded on the basis that the US Department of Transportation and Nuclear Regulatory Agency already regulate transport. The council also states that it is unfair to single out these shipments which prove safer than hazardous material shipments and that there is already funding available from the federal level. The Iowa Department of Health responded that Iowa is an NRC Agreement State and that US Department of Transportation only regulates the packaging, marking, labeling and placarding of radioactive shipments. A single radwaste accident can present a public health situation affecting crops, livestock and groundwater. Funding will go to the county emergency level. They also stated that the rule will not be rescinded. Maine, unlike Iowa, doesn't have a large volume of interstate transportation of radioactive waste. The volume Maine does have is produced in-state.

Commission Members

- Sen. Sharon Treat, Chair
- Rep. Robert Daigle, Vice Chair
- Rep. Robert L. Rines
- Rep. William R. Savage
- Sen. Norman Ferguson Jr
- Sen. Tom Sawyer
- Robert Demkowicz, DEP
- Clough Toppan, PE, DHS
- Dr. Robert Marvinney, State Geologist
- Mike Meisner, Maine Yankee
- Dr.Joseph Blinick, Licensee
- Ron Ouelette, Public
- Richard Carey, Public
- Stephen Jarrett, Public
- Jim Mitchell, Public
- W. Donald Hudson, PhD, Chewonki Foundation

All meetings of the Advisory Commission are open to the public. The commission meets 4-6 times a year to discuss LLW and decommissioning issues. Meeting dates can be found at our website or call Tom Hillman at 207-287-8401 for the next meeting time or to be placed on the meeting notification list.

GTCC, DOE’s BURDEN OR MAINE’s ?

Greater than Class C (GTCC) is radioactive waste that is, as the name says, greater than the traditional A, B and C. Current disposal sites only accept A, B and C, therefore GTCC has no place to go. The Department of Energy (DOE) inherited the burden of GTCC in 1995 when Congress made DOE responsible for disposing of radioactive waste that exceeds NRC’s limits for Class C waste under the Low-Level Waste Policy Act (LLWPA). GTCC is defined in 10 CFR 61.55 and includes relatively few specified radionuclides above certain concentration levels. These include carbon-14, nickel-59 in activated metals, niobium-94, technetium-99, iodine-129, plutonium-241, curie-242, alpha emitting transuranics with a half-life greater than five years, strontium-90 and

cesium-137. One major concern of DOE is activated metals from nuclear utilities, mainly various stainless steel components from within the reactor. DOE has no plans to store GTCC from nuclear power plants. Under the department’s current policy, utilities will store their GTCC under NRC regulations. DOE has funds in its fiscal year 2002 budget to begin Environmental Impact Statement on GTCC disposal options. DOE expects to issue its statement intent notice late in FY’02, and begin preparation for FY’03. Potential disposal alternatives include disposal in a high-level waste repository; disposal in an intermediate to deep facility such as a drilled bore-hole; storage of some material for decay and later disposal; and possible disposal at the Waste Isola-

tion Pilot Plant (WIPP). Current law states that WIPP is limited to accepting transuranic waste from DOE defense activities. Disposal at WIPP would require a congressional amendment of both the LLWPA provisions and WIPP legislation. This year Maine will have its own GTCC storage facility to store the pieces of the stainless steel core shroud from Maine Yankee’s nuclear reactor. The Independent Spent Fuel Storage Installation (ISFSI) will store spent fuel as well as the plant’s GTCC. Four of the sixty-four storage containers in the ISFSI will contain GTCC until DOE finds a solution for disposal, which could be 10-50 years or more in the future. The potential exists that a safely operating ISFSI could also in time become the solution.

A MATERIALS NIGHTMARE



Will a \$5 cover it?

Radioactive waste that is identified is disposed of in special landfills. Sometimes radioactive waste is not identified and enters other waste streams. Waste of this nature is generally Normally Occurring Radioactive Material (NORM) that is disposed of by unknown individuals. However, we must be ready for the rare missing device. Often these items are associated with scrap metal. Recently a steel mill, Ameristeel-Baldwin, located near Jacksonville, Florida experienced such a nightmare. The mill is finally back up

and running after melting a Cs-137 device on Friday the 13th of July, 2001. The steel mill had to be shut down for more than 24 days for decontamination. The associated cost are some good reasons why a disposal or recycling facility would want to be able to insure there is no undetected radioactive material at their facility (e.g. a truck monitor): The estimated cost was \$4 million for the cleanup contractor, \$4-5 million lost in production and business with additional cost for transportation and disposal. The total cost was \$12 million. Things that had to happen to get

the plant back in operation were: Initial emergency response by Florida Bureau of Radiation Control and the Mobile Emergency Response Laboratory, Reciprocity of Tennessee license for Duratek to perform work in Florida. Development of health and safety plans and approval by Florida State officials, characterization of affected areas, construction of special buffer boxes to be used between super vacuum trucks and intermodal containers, lease of 4 super sucker trucks with massive

NIGHTMARE Continued from page 2

hoses, lease of air conditioning units (temperature in ductwork was 140 degrees F.) lease/purchase of intermodal containers and rollback hoppers for dust containment, purchase of all filter bags for all 4 baghouses, lease of shower facilities and personnel decon facilities, PPE decon facility, lease of mobile lab, hiring of more than 100 outside rad-workers who also were HAZWOPER certified, lease of whole-body counter, complete bio of employees, disassembly of equipment, physical removal or decontamination of all affected areas, removal/re-

installation of all filter bags in baghouse compartments, final site remediation survey conducted by Duratek, Florida confirmation survey, and reassembly of equipment." Monitoring equipment costs are considerably less than those for clean-up.

Scrap metal facilities in Maine often have this same nightmare in a smaller scale. They have railcar loads returned due to rejection at out-of-state receivers at their cost. Loads must then be examined for the offending

material and disposed of. The total cost can run into the thousands of dollars per event. The installation of a truck monitor can single out loads with radioactive metal, but the found material must then be properly disposed of.



Where did I leave that source? It was just here!

RADON

IMPORTANT CONSUMER NOTICE:

Many consumers who are disturbed by the cost of professionally installed radon mitigation systems seek alternative methods of sealing their basements from radon entry. An internet search will yield many companies and products, some of which will claim to be cheaper and as effective or more effective in reducing the radon levels in your home. These companies and products have not been tested and proven as viable alternatives to the fan based systems.

The EPA advises that sealants have not been proven to be a permanent solution for this problem.

Typically what occurs after using one of these products, is a temporary reduction in radon levels which gives the homeowner a sense of false security. Years later when the owner tests his home again (as recommended by the EPA) he finds that the radon concen-

tration has returned to the level observed prior to the application of the sealant, and that the homes occupants had probably been exposed to this level for many years.

A fan based radon system is the most efficient, most affordable technology to date, for reducing indoor radon levels in your home. The EPA has published detailed standards and specifications for the installation of these systems, which the state of Maine has adopted and enforces. The individuals and firms who perform the installations of these systems have received training, passed an extensive written exam, and have registered with the State of Maine Radiation Control Program’s Radon Section as a Radon Service Provider. Additionally, the company advertising a radon service which is not registered with our department, is in violation of Maine’s Radon Registration Act.

One of the primary functions of our office is to inform the public of the major health risk of long-term exposure to elevated levels of radon in their indoor environment, and the need to reduce levels to minimize the risk of radon in-

duced lung cancer. Our opinions are not biased toward one product or another other, but are formed by the review of empirical and scientific evidence of a product’s or a technology’s ability to permanently reduce radon levels.

EPA advises that sealants should only be used in conjunction with an active radon mitigation system.

If you are intrigued enough by any of these alternative radon reduction products or methods to the point that you are considering purchasing them, please call our Radon Section to discuss the efficacy of the alternative method before doing so. We would be pleased to discuss with you, your radon concerns and the best radon reduction strategy for your individual needs.